Bureau of Land Management
Anchorage Field Office
6881 Abbott Loop Road
Anchorage, AK 99507
http://www.anchorage.ak.blm.gov

Environmental Assessment

2920 Permit for Monitoring Pits, Klukwan, AK
Northern Southeast Regional Aquaculture Association
AA-85967
AK-040-06-EA-002

Location:
CRM, T. 28 S., R. 56 E., sections 29 - 32
USGS 1:63,360 Quadrangle - Skagway B3

Prepared By:
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I. INTRODUCTION

The Bureau of Land Management (BLM) has prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This EA discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives. It also provides the supporting information for a determination to prepare either an Environmental Impact Statement or a Finding of No Significant Impact.

The Northern Southeast Regional Aquaculture Association (NSRAA), a private non-profit organization, has been commissioned by the State of Alaska to design and construct spawning channels in the Chilkat and Klehini Valleys.

A. Purpose and Need for the Proposed Action

The purpose of this project is to study whether the ground water levels and gravel substrate in an abandoned channel of the Klehini River is suitable for construction and management of Chum salmon spawning channels.

The harvest and fisheries performance measures for the Chilkat River fall chum stock are substantially below levels found in the years of 1970 and 1980, *(Todd Buxton, Haines and Deer Lake Projects Leader, Northern SE Regional association).* Utilization of spawning channels has proved to be a viable method of increasing salmon populations.

On September 29, 2005, the BLM Anchorage Field Office received an application from the NSRAA to dig monitoring pits on public lands north of Haines Alaska. The project area encompasses both State of Alaska and BLM managed lands located township 28 South, Range 56 East, sections 29, 30, 31, and 32, Copper River Meridian. The BLM managed lands fall within sections 29 and 32.

If the proposed project area is found to meet the requirements necessary for spawning channel construction, NSRAA will submit an application to build the channels, and a separate environmental assessment, Decision Record and FONSI will need to be completed before construction could be permitted.

B. Conformance with Land Use Plan

This action takes place in an area where no land-use plan exists. However, this environmental analysis assesses the impacts of Proposed Action and provides a basis for a decision on the proposal (43 CFR 1610.8 (b)(1).

C. Relationship to Statutes, Regulations, Policies, Plans or Other Environmental Analyses:

The Proposed Action and alternatives are subject to the Federal Land Policy and Management Act (FLPMA) of 1976, Sections 302, 303, and 310, 43 United States Code (U.S.C. 1732, 1733, 1740), 43 Code of Federal Regulations (CFR) 2920, authorizes the Secretary of the Interior to issue regulations providing for the use, occupancy, and development of the public lands through leases, permits, and easements. Concurrence has been obtained as required by Alaska National Interest Lands Conservation Act (ANILCA), P.L. No. 96-487, (94 Stat. 2371), Section 906 (k)(1)(B), December 2, 1980.

II. PROPOSED ACTION AND ALTERNATIVE

A. Proposed Action

The NSRAA proposes to use an excavator to dig up to nine (9) monitoring pits in a dry abandoned flood channel of the Klehini River. These monitoring pits would be used to document substrate composition and measure groundwater levels through Winter & Spring 2006. These pits would be approximately 5-9 feet wide and 2-4 feet deep. The proposed pit depths will be approximately 1-2 feet below local groundwater levels.

Access to the project area will be from the Haines Highway, near Mile Post 24. The excavator will use an existing road that runs alongside an established spawning channel in the immediate vicinity. After leaving the road, the excavator will cross an abandoned flood channel of the Chilkat River to the project area, (see page 5, black and white photo depicting route into project area).

NSRAA will direct the equipment to avoid major stands of vegetation and trees that would not be able to survive the excavator passing over them. NSRAA will also avoid clearing trees to gain access to the general excavation sites.

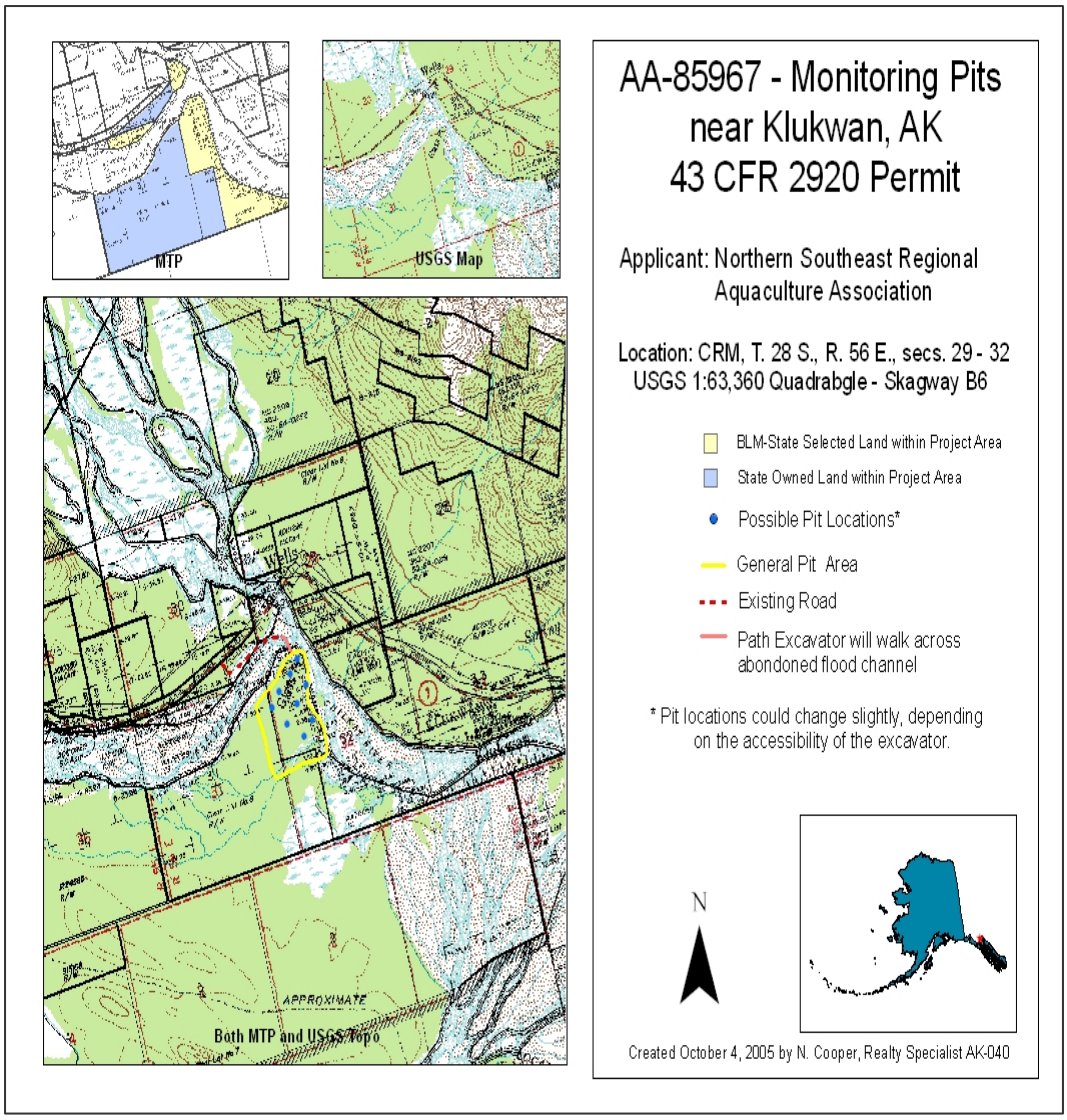
Excavated material will be side cast adjacent to the pit. Fuel storage is not necessary for this project. The pits will be dug as soon as possible after BLM and any other necessary permits from other agencies have been issued. According to NSRAA, pit construction will be completed in one day once the equipment is in place.

Since this project is located within a floodplain, the Army Corp of Engineers has issued an *Army Nationwide Permit (NWP) no. 6 – Survey Activities*. With the issuance of the permit, the Army Corp of Engineers deems that this proposed project would have no affect on floodplains.

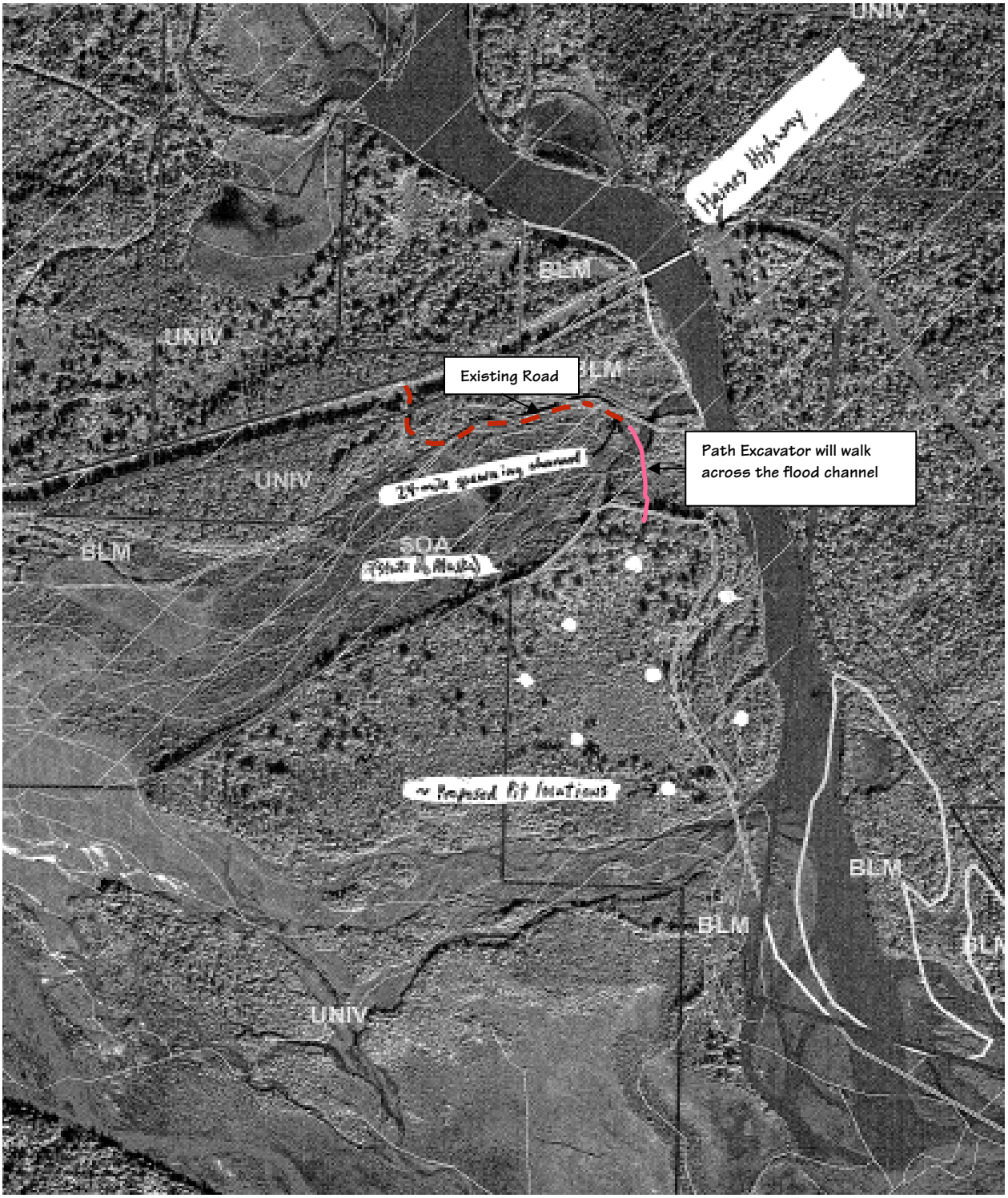
Groundwater levels in pits will be monitored weekly through winter and spring by noting the elevation of groundwater in the pit on a gauge plate installed on a metal post in each pit. The pits will be accessed by foot for weekly visits, and the monitoring equipment (lap-top computer) will be carried on-site for each monitoring event.

After the project/monitoring is completed, the gauge plates/metal posts will be taken out of the pits and the pits will be filled in. (See Project Map, Aerial Photo and Pit Diagram below).

Project Map (Full-size copy attached to document as Exhibit B)

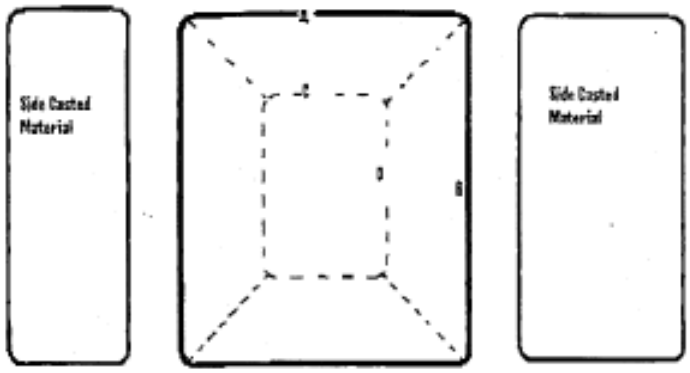


Aerial Photo (submitted with application. Date of photo unknown)



Pit Diagram (submitted with application)

Soils Pit - Top View



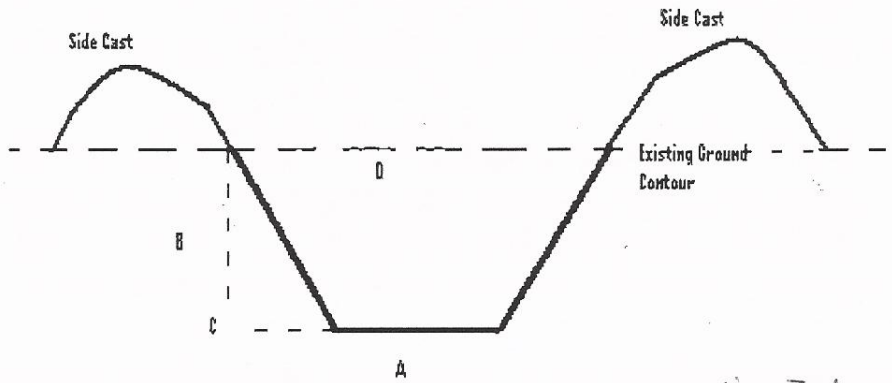
A = Top Width of Soils Pit = 5-9FT

B = Top Length of Soils Pit = 8-12FT

C = Bottom Width of Soils Pit = 4 FT

D = Bottom Width of Soils Pit = 1FT

Side View Drawing - Test Pits



A = Width of Pit Bottom = 1 FT

B = Height of Pit = 2-4 FT

C = Rise/Run Ratio of Pit Side Slopes = 1/1

D = Width of Pit Top = 5-9 FT

B. No Action Alternative

The NSRAA would not receive a permit to dig monitoring pits and the suitability of the area would not be determined. The area would stay in its current condition and management of the area would remain the same.

III. AFFECTED ENVIRONMENT

A. The following critical elements are either not present or would not be affected by the Proposed Action or the No Action Alternative:

ACEC's	Native American Religious Concerns
Air Quality	Wild and Scenic Rivers
Water Quality (Surface/Ground)	Wilderness
Environmental Justice	Invasive, Non-native Species
Farm Lands (Prime or Unique)	
Floodplains	

Cultural Resources:

The office of the State Historic Preservation Officer (SHPO) identified a known historic site, (SKG-058, Glass Point), within the project area. SHPO investigated the situation further and came to an agreement with the applicant that a qualified archeologist will be on-site while the test pits are being excavated.

The archeological consultant will complete an Archaeological Monitoring Report by conducting oral interviews prior to and during construction. The archeologist will submit the report to BLM and the SHPO within 10 days of its completion.

Invasive, Nonnative Species:

The vegetation in the project area currently consists of willow and alder shrubs, and large old growth cottonwood trees along the riparian zones. There are no known invasive or non-native plant species currently at the project site. However, the project lies within a riparian area which could potentially support invasive and non-native plant species introduced from other areas on excavation equipment.

Subsistence:

The lands proposed for the pits are BLM administered lands, validly selected by State of Alaska, and do not meet the definition of Federal Public Lands, per ANILCA sec. 102(3). The area does not fall under the authority of the Federal Subsistence Board and the various Subsistence Regulations for the Harvest of Fish, Shellfish and Wildlife on Federal Public lands in Alaska.

Therefore, under current existing conditions, the proposed action would not restrict Federal subsistence uses, decrease the abundance of Federal subsistence resources, alter the distribution of said subsistence resources, or limit qualified Federal subsistence user access.

T&E Species:
No known Threatened and Endangered Species currently exist within the project area.

Water Quality, Surface & Ground:
The Klehini and Chilkat Rivers are braided rivers systems that initiate from glacial melt water. High sediment content is a typical characteristic of glacial rivers.

B. Land Status:
The project area is located on both BLM and State lands. The State land was patented under Clear List No. 8. The BLM lands are State Selected under AA-76059. Proposed actions on state selected lands require State of Alaska concurrence under 906(k) of ANILCA. All rental fees collected will be placed in an escrow account.

If a permit is issued, the legal description for the land under BLM jurisdiction is: CRM, T. 28 S., R. 56 E, section 29 lot 8 and section 32 Lots 6-13, SW¼NW¼SW¼NW¼NW¼, S½NW¼NW¼NW¼.

C. Vegetation:
Alder, willow, and cottonwood are within the project area. Attached Exhibit – D, 1995 aerial photo, reveals small amounts of low lying brush within the river bed, and taller brush mixed with larger trees on either side of the riverbed.

D. Visual Resources:
The project area is within and adjacent to the Chilkat River flood plain. The landform is a flat, low elevation, vegetated gravel outwash site surrounded by highly braided river channels. Vegetation consists of riparian zone species including alder, willow, large cottonwoods, low shrubs and grasses. Vegetation colors range from spring and summer greens to the full range of strong seasonal yellows and local fall colors. Visibility is generally limited to the immediate area due to the height and thickness of the vegetation.

VRM management classes have not been assigned for the project area. However, the area was classified as Inventory Class IV in the VRM inventory prepared for the Ring of Fire RMP.

The objective of Inventory Class IV is to retain the existing character of the landscape. Change to the landscape must be kept to a minimum and management activities should not attract the attention of the casual observer.

E. Wildlife:

Bald eagles, salmon, trumpeter swans, moose and other wildlife including brown and black bears, lynx, marten, wolves, wolverine, small mammals, waterfowl and land birds are found within area of the proposed action.

The project area is included within the State of Alaska's Chilkat Bald Eagle Preserve boundary, shown below. The preserve hosts a concentration of bald eagles, which is greatest during the fall and winter but is relatively higher during the summer. Concentrations of bald eagles occur along the Chilkat and Klehini Rivers, including the area at the confluence of the two rivers. The eagle concentration is largely supported by runs of five species of salmon. According the Alaska Coastal Zone Authority, these lands will become part of the eagle preserve if the lands are transferred to the State of Alaska.

The Chilkat and Klehini river valleys provide a major waterfowl migration route to and from interior Alaska and Canada, with at least 15 species of ducks and geese seasonally present in the area. The Chilkat River is the southernmost known nesting area for trumpeter swans in Alaska; a BLM and State Special Status Species.

F. Fisheries:
Harvest and fisheries performance measures for the Chilkat River show that fall chum stock are substantially below levels of the 1970's and 1980's. Artificially created spawning channels have been built in the area with the intention of increasing the chum populations. Exhibit A, the chart titled "Chum Salmon Escapement to Spawning Channels in Chilkat Valley," was submitted by the applicant to show salmon escapement[1] and the performance of other spawning channels in the Chilkat Valley. Since the proposed action is for monitoring pits only, there will be no affect to the fisheries.

G. Recreation:
Recreation activities in the area of the proposed action include fishing and hunting, wildlife and scenery viewing, and limited OHV use. Access to recreation opportunities is by boat from the Chilkat River and OHV access points along the Haines Highway to the east.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action

1. Critical Elements

Cultural Resources: The proposed action could potentially disturb cultural resources identified in the project area.

Invasive, Nonnative Species:
Invasive and/or non native plant species could be introduced into the floodplain from seeds transported to the site on the excavator, equipment, and clothing used during pit construction.

Water Quality, Surface & Ground:
Any sediment entering the river system as a result of this project would be minimal in relation to the amount of naturally occurring sediment.

2. Vegetation: As proposed, the excavator would be traveling over vegetation able to withstand the disturbance of the machinery. However, some of the juvenile vegetation may potentially be broken.

[1] "Escapement," as defined by State of Alaska regulations, means, the annual estimated size of the spawning salmon stock; quality of the escapement may be determined not only by numbers of spawners, but also by factors such as sex ratio, age composition, temporal entry into the system, and spatial distribution within the salmon spawning habitat.

3. Visual Resources:
The visual impacts of the monitoring pits and associated excavation piles will be minimal during the investigation period as the pits will be below ground level and visibility is restricted to the immediate test area by vegetation. Snow will cover the site during much of the test period. The area is not visible from ground travel routes, but may be visible from the air. Due to the small size of the pits, the visual impact will be minimal and should not attract the attention of casual observers. The monitoring pits will be filled upon completion.

Visual impacts to vegetation caused by moving the excavator in and out of the project site should be minimal and temporary. Large trees will be avoided and visible impacts to small shrubs and trees will not be noticeable after the growing season. The VRM impacts of the proposed action are consistent with the objectives of Inventory Class II.

4. Wildlife:
This region is a wintering area for bald eagles, as well an important summer breeding area. Bald eagles require large trees for nesting, and return annually to established nests. The proposed project will not destroy or damage large trees in the area. Therefore, the proposed action will have minimal affects on eagle nesting habitat. However, wintering eagles may temporarily avoid the area for the one day the excavator is in use.

5. Recreation:
The scale of the proposed action is small and the location is removed from commonly used recreation areas and travel routes. Recreational users may encounter disturbances at the monitoring pits. No impacts to recreation are expected.

B. No Action Alternative

Wildlife: Numbers of salmon returning to the area may not be at levels historic for these drainages. Other wildlife will not be impacted.

C. Cumulative Impacts
This area is close to the highway and not far from a community, and is popular for off-road activities. The 1995 aerial photo on page 5 reveals evidence of extensive off-road vehicle use.

The excavator may leave trails of crushed vegetation that could attract the existing off-highway vehicles users, which could lead to the establishment of unwanted trails.

If the proposed project area is found to meet the requirements necessary for spawning channel construction, and subsequent construction authorization given, concentration of salmon may increase. Higher salmon return rates in the area may attract both fisherman and bears, resulting in potentially dangerous situations.

D. Mitigation Measures

Cultural Resources:
A qualified archeologist will be on-site to oversee the construction phase of the project to avoid disturbance to any cultural sites present.

Invasive, Nonnative Species:
The excavator will be washed prior to being used in the project area to remove all vegetative material. All equipment and apparel will be checked and cleaned before going into the project area during the construction and monitoring phases to ensure no invasive, non native species are introduced.

Vegetation:
Excavator routes to the project area and between pit sites will be carefully planned to avoid major stands of vegetation. Trees of such diameter that would break under the pressure of the excavator will be avoided as much as possible. Damage to juvenile trees within the planned route to the project area and monitoring pits will be kept to a minimum.

Visual Resources:
Damage to vegetation will be kept to a minimum to prevent lasting visual impacts on the site. Excavator routes to the project area and between pit sites will be carefully planned and the excavator will be hand guided along the route. Material excavated from the test pits will be deposited in tight piles close to the pits and not spread widely. The pits will be completely filled upon completion of the test period and disguised with rocks and vegetation to blend into the surroundings.

Wildlife:
Due to the fact that wintering eagles will be in the area, NSRAA has assured BLM that the excavator will only be needed for one day. To optimize time spent in the area, excavator routes will be carefully planned and marked to reduce disturbances to nesting eagles.

V. CONSULTATION AND COORDINATION

A. Persons and Agencies Consulted:

Greg Balen, BLM Geographic Sciences
Donna Redding, BLM Archaeologist

B. List of Preparers:

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